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PRICE CONTROL PROGRAMS, 1917–71

- ORIGINS
- TECHNIQUES
- EFFECTS ON FOOD PRICES

U.S. DEPARTMENT OF AGRICULTURE
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ABSTRACT

Inflationary forces leading to the imposition of price controls by the Government in four periods since 1914 are outlined. Basic concepts about price controls are discussed, and pricing standards and pricing techniques are described. Price movements before, during, and after World War I, World War II, the Korean Conflict, and the current Vietnam-related program are analyzed. Control of marketing margins on foods seems to have been successful in the three earlier experiences with price controls.

Key Words: Price control, Methods, Results, Food margins, Marketing margins

CONTENTS

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Price Controls in Brief

The current price control program differs from those introduced in World Wars I and II and the Korean Conflict in that: It is only partially caused by inflationary pressures of the Vietnam War; it is being put into effect later in the inflationary cycle than previous programs; and it seeks to avoid the establishment of large Government enforcement agencies.

As in past programs, food prices are again a keystone in general price controls. Because of legislative requirements in the past, farm prices were not directly controlled. Instead, a form of margin control existed, with prices of food items under ceilings at the wholesale and retail levels. Control of marketing margins appears to have been quite successful in World War I, World War II, and the Korean Conflict.

The current price control program has several unique features, compared with earlier programs. Although all were instituted to slow the accelerated rates of inflation brought about by defense programs and involved reallocation of resources to defense needs, emphasis and results differed. World War II price controls were far more comprehensive than those during World War I and the Korean Conflict, and perhaps more successful.

Price controls are usually accompanied by wage controls and sometimes by other direct controls that become necessary when indirect controls (monetary and fiscal) have failed to control inflation. However, price controls are instituted with some reluctance since they tend to restrict the operation of a "free market" system. Past programs placed recordkeeping and reporting burdens on industries and involved sizeable Government agencies.

Price control programs operate within pricing standards provided by enabling legislation or formulated by regulatory agencies. Standards involve base periods to be used, items to be included or excluded, and earning and product standards to determine permissible price levels. Major pricing techniques are price freezes, formula pricing, prescribed margins or markups, and dollars-and-cents ceilings.

PRICE CONTROL PROGRAMS, 1917-71: ORIGINS, TECHNIQUES, EFFECTS ON FOOD PRICES

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INTRODUCTION

With the issuance of an Executive Order by President Nixon on August 14, 1971, freezing most prices and wages for a 90-day period, price controls again became a matter of lively national interest. The freeze was subsequently succeeded by the Phase II program.

The objectives of this report are to: (1) indicate the effects of price controls on agriculture, with emphasis on food items, (2) examine the circumstances leading to imposition of price controls during these periods and the present program, (3) summarize previous price control programs in operation during World War I, World War II, and the Korean Conflict, and (4) provide general readers with the historical and conceptual background necessary to understand current developments.

Dimensions and Emphasis of Price Controls

The various price control programs instituted have differed in several respects. Some of their respective dimensions are summarized in table 1.

In World War I, the price control program developed piecemeal. The World War II program, the most comprehensive ever, involved many tight regulations on individual commodities and specific services. The degree of rationing required was also greater. In the World War II, Korean Conflict, and present programs, a general price freeze was succeeded by specific actions. The current program has encouraged voluntary approaches, whereas the earlier programs stressed compulsive compliance.

The position of agriculture during the various price control periods has shifted. In World Wars I and II, there was an urgent need to expand agricultural output. During World War I, the emphasis was on efficiency, home gardens, and providing needed inputs. While these also were involved in World War II, the promise of continued postwar price support for wartime expansion was an important addition. With many high-level price supports still existent when the Korean Conflict began, agricultural output was generally adequate, and little other aid was needed. In

Table 1.--Nature of price controls, supporting devices, and status of agriculture, four time periods

Period	Extent of price control	Type of price controls	Rationing	Agricultural situation and supply position	Compliance
World War I (1917-18)	Partial	Selective, usually on margins or earnings. Some dollars and cents prices calculated.	Few items	Need to expand, most emphasis on crops. Encourage efficiency. Provide inputs.	Mandatory, compulsion stressed, but with much hidden persuasion by Government.
World War II (1941-46)	Comprehensive	Freeze, followed by many tight regulations on margins and dollars and cents basis.	More items	Need to expand, more emphasis on animal products. Allocate inputs. Postwar price support guaranteed.	Investigation by price agency. Statutory penalties. Mandatory, compulsion stressed. Many legal cases.
Korean Conflict (1950-53)	Partial	Freeze, followed by regulation on margins and specified prices for selected items.	Few items	Generally adequate. Help allocate inputs. Continued price supports.	Investigation by price agency. Statutory penalties. Mandatory, compulsion stressed. Moderate number of legal cases.
Present situation (1971-)	Partial	Freeze, followed by several types of procedures being developed.	None	Adequate. Inputs available. Prices less favorable than other sectors.	Mandatory where applied, but with emphasis on voluntary compliance. IRS investigatory role. Few legal cases through freeze period.

the current situation, agricultural output has been adequate and many farmers have faced cost-price squeezes.

Changes in Food Prices and Price Spreads

Food prices, a matter of continuing concern to consumers, assume even greater importance during inflationary periods. Hence, price control programs must encompass food items. Control of food prices has essentially involved a form of margin control because prices at the farm level have been effectively exempted from earlier price control programs by statutory requirements. In the present situation, during the mid-August to mid-November freeze and the subsequent continuing Phase II program, raw agricultural commodities have been exempted.

Thus, price controls on food items have been effected at other levels in marketing channels, such as at wholesale and retail levels. The effects of these programs on food items can be examined by using price and price-spread (or margin) series maintained by ERS and its predecessor agencies. Items included were selected to represent certain categories of foods, but the same data series were not always available for various time periods.

During 1917-18, retail and farm prices for all 14 items rose above 1915-16 levels. Farm-retail price spreads were all appreciably wider than during 1915-16. The farmers' share of the retail price was higher for 12 items and the same for 2 others. As retail prices continued upward in 1919-20, farm-retail price spreads widened from those of 1917-18, with one exception. For all but one item, the farmers' share of the retail price was lower than in 1917-18 (table 2).

Retail and farm prices for 22 of 23 items averaged higher in 1942-46 than in 1940-41. Farm-retail price spreads widened on 19 items but were lower on 4 items. The farmers' share of the retail price was appreciably higher on all 23 items in 1942-46 than in 1940-41. Payments to farmers and processors on beef, pork, fluid milk, and butter held actual farm-retail price spreads below those which otherwise might have existed. With one exception, all retail prices averaged higher in 1947-48 than in 1942-46. All but one of the farm-retail price spreads widened. The farmers' share of the retail price was lower in 1947-48 than in 1942-46 for 17 items and higher for 6 items (table 3).

From 1949-50 to 1951-53, retail and farm prices rose for 22 of 23 items. Farmer-retailer price spreads widened on all 23 items, but the increase was small for many of these items. The changes in the farmers' share of the retail price were generally small, being higher on 11 items, lower on 9, and about the same for 3 items. From 1951-53 to 1954-55, retail prices averaged

Table 2.--Retail prices, farm-retail price spreads and farmers' share of retail price, 14 selected foods, United States, before, during, and after World War I

Average	Beef, Good grade 1/			Pork 1/			Fluid milk 3/			Butter 4/		
	Retail price	Farm-retail	Farmers' share	Retail price 2/	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share
	Cents per lb.		Pct.	Cents per lb.		Pct.	Cents per qt.		Pct.	Cents per lb.		Pct.
1915-16...	20.7	6.1	71	17.8	7.4	58	8.8	4.7	47	35.2	12.0	66
1917-18...	28.3	7.6	73	30.0	8.8	71	12.2	5.2	57	50.0	15.0	70
1919-20...	33.1	11.6	65	34.3	13.6	60	15.7	7.5	52	65.2	19.9	69
	Cheese, American			Chickens			Eggs			Bread, white		
	Cents per lb.		Pct.	Cents per lb.		Pct.	Cents per doz.		Pct.	Cents per lb.		Pct.
1915-16...	23.9	9.5	60	23.2	9.0	62	31.2	7.2	76	8.0	6.4	19
1917-18...	33.7	10.8	68	34.8	13.0	63	49.2	11.1	78	10.5	7.8	26
1919-20...	40.9	14.7	64	44.9	16.4	64	63.3	15.7	75	11.8	9.0	24
	Flour, white			Corn meal			Potatoes			Prunes, dried		
	Cents per lb.		Pct.	Cents per lb.		Pct.	Cents per lb.		Pct.	Cents per lb.		Pct.
1915-16...	4.0	1.6	58	2.4	0.9	62	2.1	0.7	66	13.2	7.6	42
1917-18...	6.4	2.2	66	4.5	1.5	67	3.8	1.2	69	16.2	9.4	42
1919-20...	7.2	2.8	62	4.6	1.6	64	5.2	1.8	65	26.4	15.9	40
	Navy beans			Sugar, cane								
	Cents per lb.		Pct.	Cents per lb.		Pct.						
1915-16...	8.7	2.9	66	7.3	4.6	36						
1917-18...	16.2	5.4	66	9.4	5.4	42						
1919-20...	11.1	5.2	54	15.2	8.0	46						

Source: Data from reports of Bureau of Agricultural Economics, USDA.

1/ Composite price cuts, including adjustments for byproduct allowances in farm-retail spreads.
2/ Includes lard.
3/ Series on marketing through wholesale channels.
4/ For equivalent quantities of butterfat, fluid milk for butter and farm butter.

Table 3.--Retail prices, farm-retail price spreads and farmers' share of retail price, 23 selected foods, United States, before, during, and after World War II

Average	Beef, Choice grade 1/				Pork 1/				Fluid milk 2/			
	Retail price	Actual farm-retail spread	Adjusted farm-retail spread	Farmers' share of actual	Retail price	Actual farm-retail spread	Adjusted farm-retail spread	Farmers' share of actual	Retail price	Actual farm-retail spread	Adjusted farm-retail spread	Farmers' share of actual
	Cents per pound			Pct.	Cents per pound			Pct.	Cents per quart			Pct.
1940-41	30.5	12.8		58	24.4	11.1		54	12.6	7.4		42
1942-46	36.3	9.4	2/11.8	75	34.4	9.7	2/11.3	72	15.2	7.7	2/7.8	49
1947-48	68.6	20.0		71	61.2	19.0		70	20.0	9.2		54

Average	Butter				Cheese, American			Chickens		
	Retail price	Actual farm-retail spread	Adjusted farm-retail spread	Farmers' share of actual	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share
	Cents per pound			Pct.	Cents per pound		Pct.	Cents per pound		Pct.
1940-41	38.4	12.3		68	27.4	11.8	55	29.2	12.9	56
1942-46	45.5	11.6	2/14.0	79	39.7	13.5	65	42.2	15.0	64
1947-48	83.1	20.2		76	59.8	23.0	62	53.9	22.0	59

Average	Eggs			Bread, white			Flour, white			Chickens		
	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share
	Cents per dozen		Pct.	Cents per pound		Pct.	Cents per 5 pounds		Pct.	Cents per pound		Pct.
1940-41	33.8	11.0	67	8.0	6.8	15	22.0	14.3	35	5.0	3.7	26
1942-46	51.5	14.0	73	9.1	7.0	23	31.4	18.4	41	7.3	4.8	34
1947-48	67.1	18.5	72	13.2	9.6	27	48.6	26.7	45	12.3	8.2	33

Average	Corn flakes			Potatoes			Carrots, fresh			Green beans, fresh		
	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share
	Cents per 12-oz. pkg.		Pct.	Cents per 10 pounds		Pct.	Cents per pound		Pct.	Cents per pound		Pct.
1940-41	10.6	9.4	10	22.9	12.4	46	5.6	4.0	30	12.4	6.6	46
1942-46	10.4	8.2	21	43.1	20.8	52	8.6	5.6	41	18.3	9.6	48
1947-48	16.5	12.8	22	51.4	25.4	50	11.4	7.2	38	21.2	9.5	44

Continued--

Table 3.--Retail prices, farm-retail price spreads and farmers' share of retail price, 23 selected foods, United States, before, during, and after World War II--Continued

Average	Lettuce, fresh			Apples, fresh			Oranges, fresh			Tomatoes, canned		
	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share
	Cents per head		Pct.	Cents per pound		Pct.	Cents per dozen		Pct.	Cents per no. 303 can		Pct.
1940-41	9.0	6.0	34	5.1	3.0	40	30.0	21.6	28	7.4	6.2	16
1942-46	12.2	7.0	43	10.6	5.2	50	44.9	26.8	40	10.7	8.5	21
1947-48	13.6	7.7	44	11.8	6.4	46	44.0	32.4	26	15.0	12.3	18

Average	Peaches, canned			Prunes, dried			Navy beans			Sugar, cane		
	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share
	Cents per no. 2½ can		Pct.	Cents per pound		Pct.	Cents per pound		Pct.	Cents per pound		Pct.
1940-41	17.8	15.4	14	9.8	6.8	30	7.0	3.6	48	5.6	3/3.3	3/41
1942-46	26.9	21.1	21	16.7	8.3	49	11.1	5.1	53	7.2	3/3.5	3/51
1947-48	31.8	26.4	17	23.1	13.6	41	21.6	9.3	52	9.8	3/4.6	3/53

Average	Margarine		
	Retail price	Farm-retail spread	Farmers' share
	Cents per pound		Pct.
1940-41	16.5	12.4	25
1942-46	24.4	16.1	34
1947-48	41.1	27.6	33

Source: Data from reports of Bureau of Agricultural Economics and Agricultural Marketing Service, USDA.

1/ Composite price cuts, including adjustments for byproduct allowances in farm-retail price spreads.
2/ Weighted averages for prices of deliveries to homes and sold through retail stores.
3/ Reflects Government payments to farmers and processors, 1943-46.
4/ Farm-retail price adjusted for Government processor tax.

lower on 12 items and higher on 11 items. Farm prices were lower on 12 items, higher on 8, and about the same on 3 items. Farm-retail price spreads were higher on 18 items and lower on 5 items. The farmers' share of the retail price was higher on 2 items, the same for 2 others, and lower on the remaining 19 items (table 4).

As reflected by the farmers' share of the retail price, farm prices rose relatively more than retail prices during the World Wars I and II price control periods. However, this pattern was not so evident during the Korean Conflict price control period. Control of marketing margins, on the other hand, seems to have been somewhat successful in all three periods, especially in view of the postcontrol increases in margins which occurred.

From 1969-70 to January-August 1971, retail prices rose for 19 of 23 items. Farm prices rose for 15 of 23 items. Farm-retail price spreads widened for 20 items and declined on the remaining 3 items. The farmers' share of the retail price was about the same for 7 items, higher for 8, and lower for the remaining 8 items (table 5).

Comparisons between prices and margins for August 1971 and the averages for September through November 1971 show the freeze was successful in stabilizing retail prices. On 10 items, retail prices were about the same. They were lower on 7 items and higher on 6 items, but the increases were very small. Farm prices were about the same on 7 items, higher on 5, and lower on the remaining 11 items. Farm-to-retail price spreads widened on 8 items, were about the same on 7, and declined on 8 items. The farmers' share of the retail price was higher on 6 items, about the same on 8, and lower on the remaining 9 (table 5).

It is still too soon to know the final results of Phase II and to compare them with those of earlier price control programs.

Research Needs of Price Controls

While the most visible aspects of past price control programs were those concerned with the establishment and enforcement of regulations, a substantial research effort was required to obtain pertinent information needed to carry out such programs.

Price control operations can make use of many research studies on costs, margins, earnings, profits, channels, practices, and industry structure. However, during both World Wars and the Korean Conflict, many additional studies were made by price control agencies to fill important data gaps and to update the information available. Ongoing data collection efforts, such as those of the Bureau of Labor Statistics (wholesale and retail

Table 4.--Retail prices, farm-retail price spreads and farmers' share of retail price, 23 selected foods, United States, before, during, and after Korean Conflict

Average	Beef, Choice grade 1/			Pork 1/			Fluid milk 2/			Butter		
	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share
	Cents per lb.		Pct.	Cents per lb.		Pct.	Cents per ½ gal.		Pct.	Cents per lb.		Pct.
1949-50	71.9	23.4	68	54.8	21.8	60	38.3	17.8	54	70.9	15.7	78
1951-53	81.3	26.5	67	59.2	23.6	60	43.6	20.4	53	80.3	17.0	79
1954-55	68.0	26.1	62	59.0	25.6	56	42.9	21.5	49	70.4	18.8	74
	Cheese, American			Chickens			Eggs			Bread, white		
	Cents per ½ gal.		Pct.	Cents per lb.		Pct.	Cents per doz.		Pct.	Cents per lb.		Pct.
1949-50	28.2	14.6	48	55.2	37.3	68	61.5	19.1	69	13.4	10.4	22
1951-53	32.7	16.0	51	57.5	38.6	67	66.7	19.5	71	15.2	12.0	21
1954-55	31.7	17.8	44	52.0	33.1	64	58.8	20.0	66	16.6	13.3	20
	Flour, white			Corn meal			Corn flakes			Potatoes		
	Cents per 5 lbs.		Pct.	Cents per lb.		Pct.	Cents per 10 oz. pkg.		Pct.	Cents per 10 lbs.		Pct.
1949-50	46.8	27.6	41	10.8	7.8	28	18.4	16.3	11	46.8	25.6	45
1951-53	50.3	30.0	40	12.1	8.2	32	21.1	18.3	13	56.2	30.5	45
1954-55	51.8	31.0	40	12.6	9.6	24	21.8	19.0	12	51.9	33.3	36
	Carrots, fresh			Green beans, fresh			Lettuce, fresh			Apples, fresh		
	Cents per lb.		Pct.	Cents per lb.		Pct.	Cents per head		Pct.	Cents per lb.		Pct.
1949-50	10.2	7.0	30	21.2	11.7	44	15.2	7.0	54	12.2	8.3	32
1951-53	12.1	8.3	32	23.3	12.8	45	15.6	7.4	53	14.2	9.3	34
1954-55	13.4	9.4	30	22.2	13.0	42	16.0	7.8	51	15.8	10.6	33
	Oranges, fresh			Tomatoes, canned			Peaches, canned			Prunes, dried		
	Cents per doz.		Pct.	Cents per no. 303 can		Pct.	Cents per no. 2 can		Pct.	Cents per lb.		Pct.
1949-50	49.4	35.1	29	12.4	10.0	19	29.4	25.4	14	23.8	15.8	34
1951-53	48.3	35.8	26	14.9	12.3	18	33.3	28.0	16	27.8	17.4	38
1954-55	52.8	37.1	30	14.6	12.4	16	33.0	27.5	16	32.2	21.4	34
	Navy beans			Sugar, cane			Margarine					
	Cents per lb.		Pct.	Cents per 5 lbs.		Pct.	Cents per lb.		Pct.			
1949-50	15.2	8.5	44	47.4	3/26.4	3/44	--	--	--			
1951-53	15.8	8.6	46	50.6	3/27.6	3/45	29.4	19.5	33			
1954-55	17.2	8.5	50	50.8	3/28.8	3/43	27.7	18.8	32			

Source: Data from reports of Economic Research Service, USDA.

1/ Composite price cuts, including adjustments for byproduct allowances in farm-retail price spreads.
2/ Sold in stores.
3/ Farm-retail price adjusted for Government processor tax.

Table 5.--Retail prices, farm-retail price spreads, and farmers' share of retail price, 23 selected foods, United States, recent years

Average	Beef, Choice grade 1/			Pork 1/			Fluid milk 2/			Butter		
	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share
	Cents per lb.		Pct.	Cents per lb.		Pct.	Cents per ½ gal.		Pct.	Cents per lb.		Pct.
1969-70	97.4	35.6	64	76.2	35.2	54	56.2	28.0	50	85.6	24.1	72
1971:												
Jan.-Aug. 3/	103.2	36.1	65	69.6	38.5	45	58.8	29.2	50	87.6	28.4	68
Aug. 4/	105.7	36.1	66	71.6	38.2	47	59.2	29.7	50	87.5	30.2	65
Sept.-Nov. 5/	105.8	37.1	65	71.2	37.4	47	59.2	29.6	50	87.6	29.7	66
	Cheese, American			Chickens			Eggs			Bread, white		
	Cents per ½ lb.		Pct.	Cents per lb.		Pct.	Cents per doz.		Pct.	Cents per lb.		Pct.
1969-70	48.7	27.2	44	41.4	21.4	48	61.6	21.8	65	23.6	20.2	14
1971:												
Jan.-Aug. 3/	52.6	29.8	44	41.0	21.1	49	53.4	22.6	57	25.0	21.5	14
Aug. 4/	53.1	30.4	44	42.2	21.9	48	53.4	20.6	61	25.1	21.6	14
Sept.-Nov. 5/	53.2	30.5	43	41.2	22.7	45	50.7	23.4	54	25.0	21.5	14
	Flour, white			Corn flakes			Potatoes			Carrots, fresh		
	Cents per 5 lbs.		Pct.	Cents per 12-oz. pkg.		Pct.	Cents per 10 lbs.		Pct.	Cents per lb.		Pct.
1969-70	58.4	38.1	35	31.8	29.6	6	85.0	60.4	29	17.8	11.8	33
1971:												
Jan.-Aug. 3/	59.9	38.8	35	34.0	31.6	7	87.7	65.1	26	21.0	13.3	36
Aug. 4/	60.1	39.7	34	32.9	30.7	7	93.5	69.9	25	25.8	16.5	36
Sept.-Nov. 5/	60.1	39.7	34	32.4	30.5	6	82.1	62.6	24	19.2	12.2	37
	Lettuce, fresh			Tomatoes, fresh			Apples, fresh			Oranges, fresh		
	Cents per head		Pct.	Cents per lb.		Pct.	Cents per lb.		Pct.	Cents per doz.		Pct.
1969-70	30.4	20.0	34	42.0	26.7	36	22.8	15.8	31	84.6	65.0	24
1971:												
Jan.-Aug. 3/	32.0	21.3	34	48.1	28.2	42	24.1	17.2	29	90.8	67.6	26
Aug. 4/	34.0	24.9	27	43.1	28.3	34	28.5	20.7	27	101.5	75.1	26
Sept.-Nov. 5/	34.8	19.4	43	38.0	21.3	43	22.3	14.8	34	102.1	76.1	26

Continued--

Table 5.--Retail prices, farm-retail price spreads and farmers' share of retail price, 23 selected foods, United States, recent years--Continued

Average	Tomatoes, canned			Peaches, canned			Peas, frozen			Orange juice, frozen		
	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share	Retail price	Farm-retail spread	Farmers' share
	Cents per no. 303 can		Pct.	Cents per no. 2½ can		Pct.	Cents per 10-oz.		Pct.	Cents per 6-oz. can		Pct.
1969-70	20.5	17.7	14	34.8	27.8	20	21.1	17.6	17	23.3	14.0	40
1971:												
Jan.-Aug. 3/	22.6	20.0	12	36.6	29.2	20	22.0	18.3	17	22.6	15.6	31
Aug. 4/	22.7	20.1	11	37.0	29.7	20	22.3	18.5	17	24.5	16.5	33
Sept.-Nov. 5/	22.7	20.0	12	37.0	29.8	20	22.2	18.4	17	25.0	17.0	32
	Navy beans			Sugar, cane			Margarine					
	Cents per lb.		Pct.	Cents per 5 lbs.		Pct.	Cents per lb.		Pct.			
1969-70	19.4	11.8	40	63.6	6/35.0	6/47	28.8	20.8	28			
1971:												
Jan.-Aug. 3/	21.5	10.0	53	67.8	6/37.8	6/46	32.4	22.1	32			
Aug. 4/	23.2	10.6	54	68.5	38.5	45	32.8	20.9	36			
Sept.-Nov. 5/	23.6	12.5	47	68.7	6/38.7	6/45	33.2	22.3	33			

Source: Data from reports of Economic Research Service, USDA.

1/ Composite price cuts, including adjustments for byproducts allowances in farm-retail price spreads.
2/ Sold through retail stores.
3/ Average of prices for the 8 months prior to the freeze announcement on August 14, 1971.
4/ Prices for the month when the freeze was announced.
5/ Average of prices during the 90-day freeze period ending November 14, 1971.
6/ Farm-retail price adjusted for Government processor tax.

prices) and of the Economic Research Service (prices and price spreads) also served as useful benchmarks and indicators of change.

During World War I, the accumulated knowledge from past research studies and existing data series was far smaller than that available by the 1940's and 1950's. Yet both the Office of Price Administration (OPA) and the Office of Price Stabilization (OPS) found it urgent and necessary to devote substantial efforts to large-scale accounting, cost, margin, and price studies. Work done under programs growing out of the Research and Marketing Act of 1946 has resulted in a growing stockpile of background and analytical studies. Nevertheless, the peculiar requirements of price control operations will probably mean that additional--and quick--analyses will be needed in current programs.

Uses of and Reasons for Price Controls

Viewed historically, price control is hardly a new phenomenon. The concept of "just price" appears in earliest recorded economic thought. In Roman times, the Edict of Diocletian was an example of a comprehensive price-wage program (18). In the Middle Ages, prices were widely prescribed by guilds and governments. In Colonial times in the United States, many prices were prescribed and regulated. In World Wars I and II, many governments controlled prices. The reasons for these actions varied, ranging from immediate concern with inflation to being an accepted and/or necessary part of the way of life of the particular times.

Four times in this century, Presidents of the United States have invoked price and wage controls under enabling legislation passed by Congress. In some respects, the periods in which this happened contained similar circumstances, but in other respects there were distinct differences. The differences in circumstances under which Executive actions were taken have affected the methods employed and the results obtained.

Inflationary pressures manifested by rising prices and wages were already much in evidence in each instance before direct controls were instituted. Thus, a real crisis was fully identifiable and the type and scope of indirect controls (monetary and fiscal) in application had not produced the desired restraints. In the past, direct price and wage controls always seemed objectionable to most people--businessmen, laborers, consumers, legislators, and executives. Moreover, each time controls have been dismantled in the past as, for example, in 1946 and 1953, all groups have expressed relief and the hope that such measures would never again be necessary. Thus, reluctance to employ direct controls is understandable.

The first three times direct wage and price controls were employed in this century, existing inflationary forces were singularly associated with armed conflicts abroad. Although the duration and scope of such conflicts varied, all unleashed forces that eventually made direct action on prices and wages necessary. In the current situation, only a part of the incident inflationary pressure is attributable to indirect effects of the Vietnam conflict. Of course, the effects of any armed conflict carry well beyond the period of hostilities or the life cycle of direct controls. This is reflected by the ultimate costs of these conflicts, which are several times larger than the immediate costs. Such costs, however, do not directly show the effects from inflationary pressures on prices.

Table 6 summarizes the costs to the United States in current dollars (i.e., at price levels prevailing in each period rather than on a constant price level basis) of four armed conflicts. The true relationships of these costs can better be determined by comparing them with gross national product and other measures of value for the time periods in which they occurred. But the "conflict" concept does furnish a convenient vehicle for discussing the problem of changing the allocation of resources between defense and peacetime uses.

Table 6.--Costs to the United States of major armed conflicts in current dollars

Conflict	Estimated ultimate costs	Original war costs
	Billion dollars	Billion dollars
World War II	664	288
Vietnam Conflict 1/	352	110
Korean Conflict	164	54
World War I	112	26

Source: U.S. Government Printing Office: Statistical Abstract of the United States, 1971, p. 243.

1/ Underestimated, since these figures include only through June 30, 1970.

During World Wars I and II, there was a primary problem of allocating resources between normal and wartime needs. Normal needs include those related to investment in capital goods and to output of goods for consumption in the peacetime economy. These, of course, continue during wartime but the levels can be curtailed and many needs can be deferred. The proportionate shifts to wartime needs required in these periods were relatively greater than in the two later periods. Hence, the limitations placed on output of normal capital and consumer goods were strict and widespread.

The Korean War also entailed an allocative problem, but not of such a magnitude as to require the same degree of accompanying restrictions. The direct participation of the United States in World War I and the Korean War was of shorter duration than in World War II. Hence, the accompanying restrictions were abandoned much quicker than in World War II.

The current situation, stemming only in part from United States participation in the Vietnam conflict, involves the longest of the four time periods. While an allocation problem has existed, the drain away from other uses has been more gradual, even if large in the aggregate. In some respects, the drain may have been more at the expense of housing, environmental, and welfare needs than from aggregate plant capacity or consumer goods. Probably, modernization of plant capacity (and some portions of defense) may have been curtailed or deferred by the drain process. Curtailment of plant modernization has implications for the competitive position of the United States in world markets, especially in view of wage rates here, compared with those of other countries.

The current inflationary situation may be distinguished from the earlier experiences as a "cost-push inflation" rather than a "demand-pull inflation." In the latter, an excess of purchasing power is involved, along with substantial shifts from peacetime to wartime production. In the present inflationary period, no shortages of goods exist, the industrial plant is underutilized, and unemployment is up (28, p. 2).

Because of existing trends, it is hazardous to make longrun comparisons from major economic indicators. However, such comparisons can serve to identify significant changes within shorter time periods. Thus, the magnitude of the allocation problem can be viewed in shortrun perspective for the four periods discussed in this report. The precise effects on prices of shifting resources to defense activities is closely related to prevailing economic conditions and methods of financing such expenditures. The subsequent comparisons are analogous to, but more aggregated than, those made in other studies (14, 40) with respect to World War II and the Korean Conflict (tables 7 and 8).

Table 7.--Major indicators of economic activity, before, during, and after price control periods, United States, annual averages (Billion dollars at current prices)

Period and years	Gross national product 1/	Government expenditures for national defense 2/	Gross public debt of Federal Government 3/	Federal Government receipts 4/	Gross private domestic investment	Net foreign investment	Disposable personal income 5/	Personal consumption expenditures 5/	Personal savings 6/
World War I									
1915-16	44.7	0.4	1.1	0.9	--	+2.4	40.2	35.3	+ 4.9
1917-18	69.6	7.1	13.4	3.5	--	+2.7	55.3	47.3	+ 6.0
1919-20	88.4	6.0	24.5	6.1	--	+3.3	68.0	61.7	+ 6.3
World War II									
1940-41	112.1	8.0	46.0	8.0	15.5	+1.3	84.2	75.7	+ 7.4
1942-46	196.0	60.9	187.6	36.3	12.6	-0.3	141.4	111.8	+28.6
1947-48	244.4	9.9	255.3	44.4	40.0	+5.4	179.4	167.1	+10.4
Korean Conflict									
1949-50	270.6	13.7	255.1	41.3	44.9	-0.9	197.7	183.9	+11.3
1951-53	346.2	42.7	260.1	64.3	54.6	-0.7	239.2	217.7	+17.9
1954-55	381.4	39.9	272.8	67.6	59.5	-0.5	266.3	245.4	+16.1
1964-1971									
1964-67	715.3	58.3	327.7	127.5	110.0	+3.8	492.4	448.1	+31.9
1968-69	896.6	78.4	368.4	185.9	131.9	-0.6	612.6	557.9	+38.9
1970	974.1	75.4	382.6	191.5	135.3	+1.3	687.8	615.8	+54.1
1971 7/	1030.6 8/	72.5 8/	407.0	197.2 9/	146.9 8/	-0.3 8/	731.5 8/	652.3 8/	+60.4 8/

Source: Mainly statistics of the Department of Commerce through July 1971.

1/ For 1915-20, gross national product originating in general Government, farms, and all other industries.
2/ For 1915-20, Government expenditures for major national security, years ending June 30, adjusted to calendar year basis.
3/ Years ending June 30, adjusted to calendar year basis.
4/ For 1915-20, includes total Federal Government receipts, 1948-71, Federal Budget receipts, excluding refunds and certain interfund transactions years ending June 30, adjusted to calendar year basis.
5/ U.S. Dept. Agr. estimates, 1915-20.
6/ For 1915-20, disposable personal income less personal consumption expenditures. For 1948-71, disposable personal income less interest paid and transfer payments to foreigners less personal consumption expenditures.
7/ Estimated.
8/ Average of first 2 quarters, seasonally adjusted annual rates.
9/ First quarter only, seasonally adjusted annual rate.

Table 8.--Relative changes in major economic indicators before, during, and after price control periods, United States

Period and years	As percentage of gross national product: Government expenditures for national defenses	Federal Government receipts	Gross private domestic investment	Disposable personal income	Personal savings as percentage of disposable personal income
World War I					
1915-16	0.9	2.0	--	89.9	12.2
1917-18	10.2	5.0	--	79.5	10.8
1919-20	6.8	6.9	--	78.1	9.3
World War II					
1940-41	7.1	7.1	13.8	75.1	8.8
1942-46	31.1	18.5	6.4	72.1	20.2
1947-48	4.1	18.2	16.4	73.4	5.8
Korean Conflict					
1949-50	5.1	15.3	16.6	73.1	5.7
1951-53	12.3	18.6	15.8	69.1	7.5
1954-55	10.5	17.7	15.6	69.8	6.0
1964-1971					
1964-67	8.2	17.8	15.4	68.8	6.5
1968-69	8.7	20.7	14.7	68.3	6.3
1970	7.7	19.7	13.9	70.6	7.9
1971 1/	7.0	19.1	14.3	71.0	8.3

Source: Based on table 2.

1/ Preliminary estimates.

During World War I, both Federal Government receipts and expenditures for national defense rose at a more rapid rate than gross national product. However, defense expenditures rose more than Government receipts (mainly from taxes). Accordingly, the Federal debt increased sharply. A similar pattern existed during World War II, when defense expenditures were again substantially larger than current Government receipts. However, there were some noticeable differences in the two periods in the private sector. During World War I, the rate of personal savings declined in comparison with the prewar level, and prices rose substantially as consumer goods supplies were curtailed and demand rose. During World War II, private investment decreased relative to prewar rates, but the rate of personal savings rose substantially. With supplies of many consumer goods curtailed, and prices generally held from responding upward for several years as demand rose, these savings contributed to the postwar inflation.

During the Korean Conflict, Government expenditures for defense rose absolutely and relatively, but at lower rates than in World Wars I and II. Although substantial growths had occurred in nondefense programs by this time, current Government receipts were much larger than current defense expenditures. Increases in Federal Government receipts were thus largely sufficient to offset increased defense expenditures. The Federal debt did not increase much percentagewise during this period. Moreover, there was little curtailment of private investment, and only a modest increase in the rate of personal savings. Hence, there was less incentive for postwar inflation than after World War II.

During 1964-71, gross national product continued to rise. Both defense expenditures and Government receipts rose somewhat proportionately, and Government receipts were considerably larger in relation to defense expenditures than during the early 1950's. The Federal debt trended upward after 1960. Private investment declined only slightly in relation to GNP from 1964 on. Personal savings rose as a percentage of disposable personal income.

As measured by net foreign investment, the United States maintained a favorable balance of payments during World War I, chiefly because of Government-extended credits to foreign countries. During World War II, a slight negative balance developed, but this became positive in the postwar period, partially through foreign aid programs. A negative balance existed during the Korean Conflict, but a shift to a positive balance occurred in subsequent years. From a positive balance in 1964-67, values became negative in 1968-69 and again by 1971--symtomatic of dollar and balance of payments problems unique to the current situation.

Some Price Control Concepts

The effectiveness of price control as an anti-inflationary remedy requires close examination. Many have argued that monetary and/or fiscal measures should or can be used to a degree to make price controls unnecessary. Some have presented this argument as an overriding generality, while others have maintained that such indirect controls (e.g., credit restrictions or taxes) are equal to the task only under partial mobilization or minor inflationary situations. Historically, indirect measures may not have been used to the fullest extent. Practically, they may not be so used because of other effects. Yet, both indirect and direct measures are an integral part of antiinflationary policy. And, the extent of use of indirect controls delineates the burden to be placed on direct controls.

Price control is only one kind of direct control. In wartime, priorities and allocations usually precede price controls. Rationing of consumer goods, on the other hand, is likely to accompany price controls or be instituted later as an aid to price controls on selected items.

Most analysts also believe that price control cannot succeed without accompanying wage controls. Some have argued that conditions of partial mobilization or minor inflationary periods can be such as to eliminate the need for wage controls and require only selective price controls. But with wage costs an important contributor to production costs, and where it is difficult to force cost absorption (if profits or earnings are thereby inadequate), the elimination of wage controls seems the unique exception rather than the general condition.

Wartime needs have usually required a considerable diversion of output from other uses. Hence, the case for using price controls, particularly where monetary and fiscal measures used have proven inadequate, is strong under these conditions. However, the use of price controls in partial mobilization or as a regular counterinflationary device has also been discussed by several writers (11, 14, 40). Some recent pronouncements suggest that--under certain circumstances--direct price and wage controls may be more acceptable or tolerable techniques to use in the future than they have been in the past. Although only the future will prove or disprove these assertions, one can speculate on these possibilities within such a "necessity" thesis. Thus, substantial nondefense programs, such as environmental improvement or social welfare programs could require such a major diversion of resources as to constitute a necessary basis for direct controls in peacetime.

From another standpoint--the "administrative structure" thesis--it can be argued that Government may have a continued and expanding role in price and wage setting. This could involve indirect or direct measures to balance levels so as to restrain "administered inflation" and equalize bargaining power of various groups (4).

A related thesis, attributed to Galbraith and others, concerns the inherent difficulties of using price and wage controls in sectors of the economy that are more perfectly competitive in nature. The converse of this is the relatively easier task in more imperfectly competitive sectors. The statement below summarizes the "concentration" thesis:

> "...Over the great range of manufactured producers' and consumers' goods, both in World War II and in the recent period (Korean Conflict), price control has been administered with relatively little public fuss and controversy. There have been relatively few complaints of maldistribution of supplies or of black markets. This, by common observation, is the part of the economy where market imperfection is characteristic. The great problems of price control have been encountered in food and clothing, the part of the economy which, with important exceptions, most closely approaches pure competition. At least two-thirds of the energies of the Office of Price Administration were devoted to these products, and a considerably larger fraction of its failures were in this area. The efforts to hold meat prices, before and after an effective rationing system was in effect, provided an almost classic display of the frustrations of price-fixing qua price-fixing in the market of many sellers and buyers" (11, p. 26).

From the preceding approach followed another suggestion, namely, price and wage control in the crucial industries that set the pace in the determination of prices and wages. But this approach may best be applicable in partial mobilization or minor inflationary crises where the problem of stimulating output and increases in prices and wages in other segments is minimized.

An extension of the previous ideas was recently outlined by Paarlberg (28, p. 3-4). He suggests that our economy is increasingly characterized by organized interest groups that can variously set prices for goods and services through an administered pricing approach, assert bargaining power in negotiations, or withhold resources from use for the purpose of enhancing the immediate income of one's vocational group. The exercise of concentrated economic power by interest groups is not automatically in the best interests of all.

The five processing plants with a capacity of less than 3,000 pounds each reported a total possible annual capacity of 1,500,000 pounds of live weight (table 10). Their actual output in 1970 was 431,693 pounds--approximately 29 percent of their potential annual capacity. The four plants in the category of 12,000 pounds and over had an estimated potential annual production volume of 11,000,000 pounds. Their actual output was 4,249,271 pounds--approximately 39 percent of capacity. The other six plants (medium-size category) reported a potential of 8,832,000 pounds, compared with actual output of 1,672,202 pounds--approximately 19 percent of their estimated annual capacity.

In February--the month of peak production--1,217,931 pounds of live weight catfish were processed by the 15 plants. The estimated processing capacity was 1,707,200 pounds. Therefore, in the peak production month, these plants were only operating at approximately 71 percent of their actual capacity.

Table 10.--Estimated and actual processing capacity, and amount of average investment, by size of plant, 15 processing plants in the South, 1/ 1970

Size of plant 2/ (pounds)	Estimated full capacity 3/	Actual capacity 4/	Proportion of full capacity	Average investments 5/	Plants reporting
	Pounds	Pounds	Percent	Dollars	Number
Small--less than 3,000	1,500,000	431,693	29	42,800	5
Medium--3,000-11,999	8,832,000	1,672,202	19	146,666	6
Large--12,000 and over	11,000,000	4,249,271	39	517,500	4
Total	21,332,000	6,353,166	30	--	15

1/ One plant did not report its full capacity.

2/ Size is determined by volume of live weight that can be used in one 8-hour shift with present facilities.

3/ Full capacity is volume done in one 8-hour shift for 250 days at 80 percent of peak capacity.

4/ Actual capacity is the volume in live weight actually processed in 1970.

5/ Average investment is the total estimated value of building and equipment for the processing facility.

other hand, curtailment of "normal" exports could mean downward pressure on prices, other things being equal. Curtailment of use for civilian goods would create tremendous upward pressures and outright prohibition of output would encourage the search for used or repaired items or substitutes. For some items, such as those in agriculture, increased output may not be readily obtainable because of input shortages or a longer production period (beef). Improved incomes lead to attempted new purchases of some items and attempted substitutions of "superior" for "inferior" products. Demand may be stimulated for some items merely because they are the best available substitute for preferred items in short supply. Shifts in consumers' preferences can intensify price pressures on items for which demand has increased.

The net result of all these forces can require some form of price controls on a wide variety of items, ranging from tight ceilings to those which are largely inoperative. In some instances, rationing at the consumer level may be required to help equalize opportunities to buy. In World War I, priorities and allocations were widely used to influence supplies, but sugar was rationed and there were meatless days and meatless meals. In addition to comprehensive allocations and priorities during World War II, rationing applied to such diverse items as automobiles, tires, gasoline, fuel oil, stoves, shoes, bicycles, typewriters, meat, butter, fats, oils, canned fruits and vegetables, sugar, and coffee. During the Korean Conflict, priorities and allocations on defense-related materials such as metals were used, but the general supply situation was such that rationing was much less required. It was applied to consumer durables, nylons, soap flakes, shortening, and sheetings. In some instances, circumstances have suggested the use of subsidies to minimize increases in consumer prices. During 1943-46, Government payments to producers and processors were employed to accomplish this end on beef, pork, fluid milk, and butter.

Changes in Prices, Costs, Wages, and Unemployment

Examination of selected statistical series illustrates the strength of inflationary forces before and after price control programs and the extent to which these were checked by such programs (table 9).

Wholesale and farm prices rose faster than consumer prices before and during the period of World War I price controls. Farm prices rose faster than prices paid by farmers. Hourly earnings of workers in manufacturing rose somewhat in parallel to prices. Unemployment declined from 1914 until 1918, thus contributing additional buying power. After the war, consumer prices continued to rise, but at a lower rate than during the

Table 9.--Rates of change in selected price, cost, and wage series, during, and after price control programs in the United States

Period and years	Consumer price index		Wholesale price index		Farm indexes			Hourly earnings production workers in manufacturing 2/	Percentage of labor force unemployed	
	All commodities	Food	All commodities	Food and food products	Prices received by farmers	Prices paid by farmers	Parity ratio		Beginning year	Ending year
	(Percent change per year)									
World War I										
1914-16	+ 4.3	+ 5.6	+12.8	+ 8.8	+ 8.7	+ 6.3	+ 2.5	+ 9.7	8.0	4.8
1916-18	+19.0	+23.9	+26.7	+33.9	+36.2	+24.5	+10.3	+25.7	4.8	1.4
1918-20	+16.7	+12.9	+ 8.8	+ 3.4	+ 1.2	+11.8	-13.5	+18.6	1.4	4.0
World War II										
1940-42	+ 8.2	+14.1	+12.8	+22.6	+28.6	+11.9	+13.5	+14.9	14.6	4.7
1942-46	+ 4.9	+ 7.2	+ 5.6	+ 9.0	+12.1	+ 9.1	+ 2.2	+ 6.6	4.7	3.9
1946-48	+11.7	+15.9	+16.4	+16.4	+10.7	+12.7	- 2.2	+11.8	3.9	3.4
Korean Conflict										
1949-51	+ 4.5	+ 6.3	+ 7.9	+ 9.6	+10.7	+ 5.8	+ 5.2	+ 6.6	5.5	3.0
1951-53	+ 2.0	+ 0.1	- 2.0	- 5.2	- 8.0	- 0.5	- 9.8	+ 5.8	3.0	2.5
1953-55	0.0	- 0.9	+ 0.3	- 2.6	- 4.3	- 0.5	- 4.2	+ 3.4	2.5	4.0
1960-1971										
1960-65	+ 1.3	+ 1.5	+ 0.4	+ 0.6	+ 0.8	+ 1.6	- 0.7	+ 3.1	5.5	4.5
1965-70	+ 4.6	+ 4.3	+ 2.8	+ 3.0	+ 2.5	+ 4.2	- 1.3	+ 5.7	4.5	4.9
1970-71 1/	+ 4.5	+ 3.5	+ 4.0	+ 4.3	+ 3.7	+ 5.3	- 1.4	+ 5.9	5.0	5.9

Source: Statistical series of the Bureau of Labor Statistics and the U.S. Department of Agriculture.

1/ From August 1970 to August 1971.
2/ Comparisons of wage rates are not strictly comparable due to changes in productivity and number of hours worked.

war years. Wholesale prices rose at a much lower rate than consumer prices. In the postwar agricultural recession, farm prices increased little while prices paid by farmers rose faster. Unemployment grew somewhat after the war.

Prior to the imposition of World War II controls, prices and wages rose rapidly. Farm prices rose more rapidly than prices paid by farmers. Unemployment was reduced drastically from the depression levels of the late 1930's. The further decline during the war years contributed further to additional buying power. Prices and wages rose much slower in 1942-46 than from 1940 to 1942. Farm prices rose more than consumer and wholesale prices, and also more than prices paid by farmers. After the removal of controls, prices and wages increased at a higher rate. Farm prices rose less than prices paid by farmers. Unemployment declined further.

Prior to the imposition of controls during the Korean Conflict, prices and wages grew significantly but at a lower rate than before the World War II control period. Farm prices rose more than prices paid by farmers. Unemployment decreased. During 1951-53, consumer prices rose very little, but wholesale and farm prices fell. Wage rates increased more than consumer prices and unemployment declined further. Farm prices decreased much more than prices paid by farmers. After controls were removed, prices were steady to lower, with significant declines occurring in farm prices. Farm prices declined more than prices paid by farmers. Wages increased but unemployment also increased.

Prices and wages rose much more rapidly in 1965-71 than in 1960-65. Unemployment dropped from the 1960-65 level, but rose thereafter. Prices paid by farmers increased more rapidly than farm prices throughout the entire period.

Thus, even the rather tight price and wage controls of World War II did not fully halt upward movements in prices and wages, but did appreciably slow down the rates of increase. A similar conclusion could be drawn from the period of controls during the Korean Conflict, although inflationary pressures were much less and the supply situation vastly better than during 1942-46. Since controls of the scope and depth employed in these earlier experiences did not halt, but only restrained inflation; a realistic goal for an extended price control program would be to slow the rate of inflation.

Under the current program, the Phase I price-wage freeze from mid-August to mid-November halted the rapid upward movement operative in the prefreeze period. Under Stage II, announced goals are to hold average price increases to 2.5 percent and average pay increases to 5.5 percent a year. Moreover, every rise in prices must be based on a rise in costs.

Effectiveness of Price Controls

Price controls during World War I were only partially effective. Efforts were concentrated on holding down the cost of purchases by the Government, the nature and coverage of controls (only 42 percent of the more important commodities were under price control at the time of the Armistice, up from 4 percent in 1917), the need to encourage food production, and heavy reliance on margins and returns techniques in price orders. While one report suggested controls were "applied late, and somewhat incidentally,...this price control was generally quite effective..." (30, p. 3-5), the rise in prices during 1917 and 1918 was very substantial when measured by consumer and wholesale price indexes.

The record of OPA in achieving price stability in 1942-46 was quite commendable, especially in view of the inflationary prospects which existed. Annual rates of change in major price indexes do not do justice to that record because several distinct periods are included, at least in the 4-year comparison. From May 1942 to May 1943, retail prices were frozen by the General Maximum Price Regulation, but many farm product prices were excluded by statutory restrictions and only brought under controls later in the year. Consequently, while the consumer price index for all commodities rose 7.8 percent, food prices rose 17.6 percent. During the "hold-the-line" period (May 1943 to June 1946) the consumer price index for all commodities increased 6.6 percent and food prices less than 2 percent. In these years, dollars-and-cents ceilings were applicable on most food items, some prices were "rolled-back," and processor subsidies were used on some items. When controls were lifted rapidly beginning in July 1946, prices rose at the sharpest rate ever recorded. Hence, the period from June 1946 to March 1947 saw the overall index rise 17.3 percent and that for food 30.2 percent. Black markets existed for many items, including foods, during the years of OPA operation. Since such prices were largely unrecorded, the indexes probably understated price levels by 3-4 percent (37, p. 2-15).

The scope and depth of price controls during 1951-53 was far less than during World War II. Freeze techniques were supported by selective specific ceilings, and a whole array of standby orders were generated but never issued.

During 1951-53 when price controls were operative, price increases were minimal and some, particularly in the farm and food products categories, actually declined. But the inflationary forces were less than those during World War II. One explanation for this indicated:

"Since our response to the communist aggression in mid-1950, our prosperity has of course been accompanied and stimulated by high and rising defense spending. But it is erroneous to say that this spending has been the main prop for our economy, because taxes have been correspondingly increased so that the defense program thus far has been on a pay-as-we-go basis and consequently has not added the amount of inflationary stimulus which would have otherwise been the case. In this respect, the situation is very different from that during World War II, when only about half the cost of the war was being paid out of taxes. It should also be noted that defense spending draws resources away from production for civilian use; and in this sense, the increase in civilian supplies since mid-1950 has not been because of defense spending but despite it. We have not only been paying as we go for the defense program measured by taxes; we have also been paying for it as we go measured by the expansion of production" (38, p. 23).

Timing of Price Control and Decontrol

Based on World War I, World War II, and Korean Conflict experience, the full effectiveness of price controls may have been influenced substantially by the timing of imposition and removal.

Although United States entry into World War I did not occur until April 1917, prices had been rising noticeably since 1915 because of effects on U.S. trade of the conflict in Europe. But, "...little was done to regulate prices until August 1917" and controls were "...perhaps abandoned too soon..." (30, p. 3). Most prices continued to rise until 1920, after controls were removed following the Armistice in November 1918.

Price controls may not have been imposed soon enough in World War II and the Korean Conflicts. Prices had been rising rapidly prior to the issuance of the freeze orders in 1942 and 1951. The OPA issued the General Maximum Price Regulation in April 1942, and the OPS the General Ceiling Price Regulation in January 1951. These and subsequent more detailed controls were abandoned in 1946 and 1953, respectively.

One report suggested in early 1953 that: "...It was a mistake to abandon controls too rapidly in 1946, and we should not abandon them too rapidly now, although the outlook for stability is better now than it was at that time. Similarly,

we would have been much better off if price and wage controls could have been imposed more quickly after the Korean outbreak and especially after the Chinese intervention in late 1950, instead of early in 1951..." (38, p. 20). Perhaps, in retrospect, few would now argue with the contention that price controls were abandoned too soon after World War II. However, this is less true of 1953, and many were suggesting by mid-1952 that the need for price and wage controls was rapidly passing (8, 19).

After price controls were removed in 1946, prices did indeed rise rapidly for the next 2 years, largely under the impetus of pent-up wartime purchasing power. However, prices were stable--some indexes even declining--from 1953 to 1955.

Pricing Standards

Price control programs operate within a set of guidelines on levels of prices, permitted increases, exceptions, etc. Such pricing standards arise in two ways: As specified in legislation, and as adopted by regulatory agencies. (See, for example, 24-7, and 40, p. 203-214). Legislation usually specifies exemptions or adjustments to be made because of other laws and regulations. Some examples in the Emergency Price Control Act of 1942 involved the Agricultural Marketing Agreements Act of 1937, as Amended, the Commodity Exchange Act, as Amended, and the Tariff Act of 1930, as Amended.

Legislation may provide several alternative base periods which must be considered in establishing maximum prices. It may also exclude certain commodities from price control or require certain cost increases to be recognized in ceilings. Actions of price control agencies may also establish base periods. They may also spell out earning, profit, or margin specifications in regulations. Price ceilings may also be set by using guidelines that ensure equal accessibility to consumer supplies, maintain normal seasonal flows, and permit existing marketing channels to continue in operation. Decisions on exemption or suspension of price regulations, or allowing cost increases, may also be made according to standards developed by price control agencies.

Some pricing standards in the Emergency Price Control Act of 1942 were:

> "...give due consideration to the prices prevailing between October 1 and October 15, 1941...or if...there are no prevailing prices between such dates, or the prevailing prices between such dates are not representative because of abnormal or seasonal market conditions or other cause, then to the prices prevailing during the nearest two-week period...No maximum price for

> any agricultural commodity below the highest of any of the following...110 per centum of the parity price adjusted...for grade, location, and seasonal differentials, or in case a comparable price has been determined...110 per centum of such comparable price...the market price prevailing...on October 1, 1941...December 15, 1941; or...the average price during the period July 1, 1919, to June 30, 1929..."

Some pricing standards in the Denfense Production Act of 1950, as Amended, were:

> "...representative of those prevailing during the period May 24, 1950, to June 24, 1950, inclusive...or ...those prevailing on the nearest date on which... they are generally representative...for any agricultural commodity...The parity price for such commodity...adjusted...for grade, location, and seasonal differentials...No ceiling shall be established or maintained for any agricultural commodity below 90 per centum of the price received (by grade) by producers on May 19, 1951..."

The Economic Stabilization Act of 1970 indicated that:

> "The President is authorized to issue such orders and regulations as he may deem appropriate to stabilize prices, rents, wages, and salaries at levels not less than those prevailing on May 25, 1970."

OEP Economic Stabilization Regulation No. 1 provided a base period of July 16, 1971 through August 14, 1971 or the nearest preceding 30 days where no transactions had occurred.

In a postfreeze period, precise pricing standards are essential. These are of two general types, earning standards and product standards.

Some examples of earning standards are given below. OPA used the average return on net worth of each industry during the prewar years 1936-39 to determine minimum reasonable earnings. OPS used 85 percent of the return on net worth in the best 3 years of the 1946-49 period. Both were standards set by Congress for the corporate excess profits tax. Exceptions were made when base period earnings were considered abnormal. OPA used a minimum return of 10 percent on net worth in such cases. An earnings standard based on return on net worth seems more appropriate for a period of severe inflationary pressure, whereas a return-on-sales standard might be better for a more limited stabilization program in a period of moderate inflationary pressure. Earnings

standards should be stated in terms of profits before income and excess profits tax (40, p. 204-207).

Under the current program, earnings during the past 3 years are considered in approving allowable increases in prices.

Product standards are used to determine ceiling prices on individual products or group of products. In the case of small sellers, data may be inadequate on net worth. In the distributive trade, product standards may be developed based on average "expense ratios" or the cost of doing business in a base period. These would provide reasonable margins to be added to the cost of goods. Product standards may sometimes be used as incentives to obtain needed supplies. Farm products often have required special treatment, particularly where parity prices were involved (40, p. 207-211).

Earnings or product standards could be applied to an industry or all of a given product, or they could be used on an individual firm basis. If such standards are applied in an aggregative sense, they would permit greater returns for more efficient firms, but might involve losses for other firms. Ceiling prices would tend to be more uniform than with an individual firm approach, particularly where product standards are used. Where applied in an aggregative sense, a "bulk-line concept" might be used. This would involve establishing values which reflected at least a break-even position for most of the output in a particular industry or on individual products. Standards applied to individual firms would offer the opportunity for realizing recent individual levels of returns, but would result in less uniformity in price ceilings.

Pricing Techniques

Pricing techniques refer to the methods used to determine ceiling prices. (See, for example, 24-8, and 40, p. 190-205). Examples are price freezes, formula calculations, prescribed margins or markups, and dollars-and-cents prices. The last named may be calculated and issued by price control agencies, or determined, posted, or maintained for examination by firms themselves.

In a period of rising prices, the imposition of a price freeze is likely to catch most prices at levels above legal minima specified in legislation passed earlier. There are, however, likely to be enough exceptions to necessitate some adjustments above freeze prices. In additional situations, freeze prices for some firms or items may not fully reflect cost increases incurred, but not yet shown in prices or margins. Neither do freeze prices readily provide for new sellers, those with no base period experience, or new items. Hence, a freeze

may fill a temporary need for halting rising prices, but necessitate the development of other approaches for relatively quick implementation.

A formula ceiling is a maximum price computed according to a specified procedure in a regulation. The ceiling can be set by a seller or a price agency. It may provide for the addition of particular cost items and a margin for other cost items and profit. It can also accomodate new products or styles.

Margin control is a special use of formula ceilings, providing for the use of a customary margin or markup over costs. It is particularly adapted to wholesale and retail trade. Such margins or markups can be those of individual firms or they can be specified for certain types of firms, according to size categories or the kinds of services performed.

Dollars-and-cents ceilings can be determined by individual firms or the price control agency. These ceilings were extensively used during World War II and to a lesser extent during the Korean Conflict. Such ceilings are often contained in regulations, and/or they may be attached to articles sold or posted in places of business. One major advantage of dollars-and-cents ceilings is that they are readily know and observed. Formula ceilings may not share this advantage unless sellers are required to state them.

The current Phase II program contains some unique features relative to ceiling prices. Firms with sales of $100 million or more must notify the Price Commission of any proposed increases and get approval before putting them into effect. Firms with $50-100 million sales must make quarterly reports to the Commission on changes in prices, costs, and profits. Other firms do not have to report, but are subject to comparable criteria and to monitoring and spot checks. Posting of prices is required for large firms.

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